

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|---------------------|----------------------|-------------------------|------------------|
| 10/622,973 | 07/18/2003 | Daniel J. Zillig | 58067US002 | 3008 |
| 32692 | 7590 06/02/2006 | | EXAM | INER |
| 3M INNOVA | ATIVE PROPERTIES CO | MATZEK, MATTHEW D | | |
| PO BOX 3342 | • | | | |
| ST. PAUL, MN 55133-3427 | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |
| | | | DATE MAILED: 06/02/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| | 10/622,973 | ZILLIG ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Matthew D. Matzek | 1771 | | | | |
| The MAILING DATE of this communication appeariod for Reply | opears on the cover sheet with th | e correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING IS - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perioder Failure to reply within the set or extended period for reply will, by statution and the set of the set of the mailing terms and patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICAT .136(a). In no event, however, may a reply b d will apply and will expire SIX (6) MONTHS to tte, cause the application to become ABANDO | ION. the timely filed from the mailing date of this communication. DNED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 13 | <u>March 2006</u> . | | | | | |
| | is action is non-final. | | | | | |
| <i>,</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-10,12-36,47,49,51 and 52</u> is/are p 4a) Of the above claim(s) is/are withdr | | | | | | |
| · <u> </u> | 5) Claim(s) is/are allowed. | | | | | |
| 7) Claim(s) is/are objected to. | 6) Claim(s) <u>1-10,12-36,47,49,51 and 52</u> is/are rejected. | | | | | |
| 8) Claim(s) are subject to restriction and | or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examir | ner. | | | | | |
| 10)⊠ The drawing(s) filed on <u>18 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to th | e drawing(s) be held in abeyance. | See 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the corre | • | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list | nts have been received. nts have been received in Applic fority documents have been rece au (PCT Rule 17.2(a)). | cation No eived in this National Stage | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summ Paper No(s)/Ma | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | | nal Patent Application (PTO-152) | | | | |

Art Unit: 1771

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/13/2006 has been entered.

Response to Amendment

2. The amendment dated 3/13/2006 has been fully considered and entered into the Record. Claims 1-10, 12-36, 47, 49, 51 and 52 are currently active. Claims 1 and 25 have been amended and contain no new matter. The previously applied art rejections have been withdrawn due to amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-10, 17-24, 47 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Willman et al. (US 2002/0042962).

Willman et al. teach a cleaning wipe comprising a fiber web having opposing faces, which is impregnated with pressure sensitive adhesives (PSA) such as polyacrylates [0107] and block copolymers [0123]. The Examiner takes the position that the tacky material is present at the working surface and at a level greater in the intermediate region

Art Unit: 1771

than at the working surface as the application means for the adhesive preferably applies at least a substantial amount of the additive at points on the sheet that are "inside" the sheet structure. It is an especial advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface, can only cause limited, or no, adverse effects. The presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178]. The applied publication does not specifically state regions within the fibrous article however the applied article meets the instantly claimed limitations of claims 3-10. The fibrous wipe may contain one or more layers [0241] may be either woven or nonwoven [0053] and made of polyester or polypropylene fibers [0072]. Examiner takes the position that the tacky material (i.e. PSA) coats individual fibers as the article may be a nonwoven that is impregnated with said tacky material. Claim 49 is rejected as the "intermediate region" may be of the applied art may be divided into any number of portions which define approximately one-third thickness of a the fiber web.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1771

4. Claims 12-14 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Willman et al. (US 2002/0042962).

Although Willman et al. do not explicitly teach the claimed feature of exhibiting a Drag Value of not greater than 2 pounds, it is reasonable to presume that said property is inherent to Willman et al. Support for said presumption is found in the use of like materials (i.e. [PSA impregnated fibrous web with a greater concentration of adhesive in the interior]). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of exhibiting a Drag Value of not greater than 2 pounds would obviously have been present one the Willman et al.product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

- 5. Claims 1-10, 17-24, 47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962).
 - a. Reiterer et al. teach the creation of tack pads comprising nonwoven fabrics impregnated with PSA (Abstract). The nonwoven web may comprise polyester and polypropylene fibers (col. 1, lines 50-57). Reiterer et al. is silent as to having higher concentrations of adhesive in the interior of the tack pad, having different properties at its two opposing faces, the claimed Drag Values and claimed PSA levels.
 - b. Willman et al. teach a cleaning wipe comprising a fiber web having opposing faces, which is impregnated with pressure sensitive adhesives (PSA) such as polyacrylates [0107] and block copolymers [0123]. The Examiner takes the position that

Art Unit: 1771

the tacky material is present at the working surface and at a level greater in the intermediate region than at the working surface as the application means for the adhesive preferably applies at least a substantial amount of the additive at points on the sheet that are "inside" the sheet structure. It is an especial advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface, can only cause limited, or no, adverse effects. The presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178]. The applied publication does not specifically state regions within the fibrous article however the applied article meets the instantly claimed limitations of claims 3-10. The fibrous wipe may contain one or more layers [0241] may be either woven or nonwoven [0053] and made of polyester or polypropylene fibers [0072]. Examiner takes the position that the tacky material (i.e. PSA) coats individual fibers as the article may be a nonwoven that is impregnated with said tacky material.

- c. Since Reiterer et al. and Willman et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Willman et al. would have been recognized in the pertinent art of Reiterer et al.
- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the multiple layers, impregnant and impregnant distribution of Willman et al. because it is an especial

Art Unit: 1771

advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface, can only cause limited, or no, adverse effects. The presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178, Willman et al.].

- e. Claim 49 is rejected as the "intermediate region" may be of the applied art may be divided into any number of portions which define approximately one-third thickness of the fiber web.
- 6. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962) as applied to claim 1 above, and further in view of Truong et al. (EP 1 238 621).
 - a. Truong et al. disclose a double-sided cleaning implement comprising a reversible cleaning pad including first and second sides of cleaning web material (Abstract) each having different cleaning materials [0014]. The first and second layers are made of a cleaning web material such as a woven cloth web comprising microfibers, preferably microfibers of polyester and nylon [0039]. The cleaning pad may be composed of three or more layers, wherein the first and second layers form the outer layer [0029]. The cleaning pad of Truong et al. has drag values ranging from 1.25 to 3.33 N (0.28 to 0.751b_f) [0058].

Application/Control Number: 10/622,973

Art Unit: 1771

b. Since Reiterer et al. and Truong et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Truong et al. would have been recognized in the pertinent art of Reiterer et al.

Page 7

- c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the different cleaning material surfaces and drag values of Truong et al. motivated by the desire to clean dry, damp and wet surfaces as well as scour other surfaces [0014, Truong et al.].
- 7. Claims 15, 16, 25-36, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962) and Truong et al. (EP 1 238 621) as applied to claim 13 above, and further in view of and Tanaka et al. (EP 0822093).
 - a. Tanaka et al. disclose a cleaning sheet, which comprises a substrate, a pressure-sensitive adhesive (PSA) layer formed on one or both sides of the substrate, and a porous screen disposed on the PSA layer (Abstract). Example 1 of the applied application utilizes a PSA consisting of 2-ethylhexyl acrylate, acrylic acid, and ethyl acetate at a thickness of 30 microns (col. 9, lines 40-48). Using the rule of mixtures the density of the PSA is 0.89695 g/cc, which provides a basis weight of the PSA layer of 26.9 g/m² (calculation done by Examiner).

 $0.89695 \text{g/cc} = 896,950 \text{g/m}^3 \text{ (density conversion)}$

 $896,950 \text{ g/m}^3 * 30*10^{-6} \text{m} \text{ (thickness)} = 26.9 \text{ g/m}^2 \text{ basis weight of PSA layer}$

Art Unit: 1771

b. Since Reiterer et al. and Tanaka et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Tanaka et al. would have been recognized in the pertinent art of Reiterer et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the PSA levels of Tanaka et al. motivated by the desire to provide a PSA cleaning sheet with which cleaning can be easily and smoothly conducted highly efficiently while satisfactorily preventing adhesive transfer (col. 3, lines 9-12, Tanaka et al.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MOM